

REMARKS

Withdrawal of the final rejection and entry of the above amendments and allowance of this application are respectfully requested.

Upon entry of this Amendment, claims 3 to 8 and 11 to 13 will be pending, of which claim 13 is independent and amended. Claim 13 is amended to add additional emphasis to those features which distinguish the present invention from the prior art, particularly EP 732381. In particular, claim 13 recites the mole ratio of isocyanate groups to isocyanate reactive groups based on the disclosure at page 4, lines 17-18. This 1:1 mole ratio merely emphasizes the fact that the polyurethane is linear and not crosslinked.

For still further emphasis, claim 13 now clarifies that the colorant, e.g., dyestuff, is soluble in the water-immiscible organic solvent (see, page 5, lines 2-3; see also, page 6, line 36 to page 7, line 2).

Accordingly, entry of the above amendments is respectfully requested as it is believed that these amendments place the application in condition for allowance and/or better condition for Appeal. Furthermore, the amended claims should not require additional search or examination since the issues regarding crosslinking and the relationship between colorant and polymer have been fully addressed.

Claims 3 and 5 to 8 and 11 to 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over EP 732381 alone, or alternatively in view of Lent *et al.* (U.S. Pat. No. 5,837,042). Claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over EP 732381 alone or alternatively, in view of Lent *et al.* as applied above, and further in view of Suzuki *et al.* U.S. 6,153,001.

EP 732381 states that the particles of the composition are cross-linked urethane polymers (see, for example, page 3, lines 2 to 3). Furthermore, EP 732381 provides no suggestion for forming a composition comprising non-crosslinked urethane polymers.

Although not considered relevant in view of the foregoing amendments, Applicants respond to the Examiner's comments in the paragraph bridging pages 3-4 of the Action as follows.

First, the recitation of mole ratio of about 1:1 removes any issue that the polyurethane is not crosslinked.

Second, the disclosure on page 1, line 29 using the term "comprising" does not implicate whether crosslinking agents were intended. In any event, the question is moot in view of the claim amendment.

Third, the use of Jeffamine in Example 2 at page 10 has been misconstrued. Jeffamine M1000 is a Mono amine (the "M" designation), particularly, poly(ethylene/propylene) polymer carrying terminal CH<sub>3</sub>O- and -CH<sub>2</sub>-CH(CH<sub>3</sub>)-NH<sub>2</sub> groups (MW about 1000). Therefore, rather than functioning as a crosslinking agent Jeffamine M1000 functions a polymerization chain-terminating agent.

Accordingly, the claims, given their broadest reasonable interpretation, would not have been *prima facie* obvious over EP 732381, considered alone or in combination with Lent *et al.*

Regarding the rebuttal argument (b) in the second full paragraph on page 4 of the Action, the claims now recite that the colorant is miscible in the water-immiscible organic solvent.

Regarding the rebuttal argument (c) in the paragraph bridging pages 4-5, the disclosure of EP 732381 does not disclose that the water-immiscible solvent is a solvent for colorant. In any case, it is clear from the disclosure of EP 732381 that any solvent present in the ink does not come into contact with the polyurethane encapsulated colorant.

Regarding the additional disclosure of Suzuki, as applied to claim 4, it is noted that even if benzyl alcohol were to be included in the ink of EP 732381, this would still not result in the ink compositions of the present invention.

Moreover, to the extent that the aliphatic alcohols and benzyl alcohol contain OH groups which would react with the isocyanates, it would not have been obvious to include such solvents in the compositions of EP 732381. ("Any organic solvent can be used as long as it does [not] react with the polyol (A) containing an ion forming group, polyisocyanate (B), organic metal catalyst (catalyst promoting urethane formation), and polyamine (C)." – page 9, lines 9-11; exemplified by, e.g., esters, ethers, ketone-type hydrocarbons, and others. page 9, lines 12-16).

Consequently, the rejections in the outstanding Office Action do not present a *prima facie* case of obviousness and the Applicants respectfully request that the rejections be withdrawn.

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Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached Appendix is captioned "Version with markings to show changes made".

CONCLUSION

As all the rejections noted in the Office Action have been addressed, Applicants request reconsideration of the present application and submit that this application is in condition for allowance. A timely Notice to that effect is respectfully requested. Should questions relating to patentability remain, the Examiner is invited to contact the undersigned to discuss the same.

Respectfully submitted,

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Enclosure: Appendix

**APPENDIX: VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS**

--13. (Amended) An ink jet printing ink composition comprising [a colorant,] water, water-miscible organic solvent, water-immiscible organic solvent, a colorant which is soluble in the water-immiscible solvent, and a water-dissipatable linear polyurethane having a weight average molecular weight less than 25,000, which is obtained from the reaction of:

- (a) at least one diisocyanate; and
- (b) at least one compound having one or two isocyanate reactive groups;

wherein the mole ratio of isocyanate groups to isocyanate-reactive groups is about 1:1.—

*End of Appendix*